



Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

State of West Virginia Master Agreement

Order Date: 01-09-2025

CORRECT ORDER NUMBER MUST
APPEAR ON ALL PACKAGES, INVOICES,
AND SHIPPING PAPERS. QUESTIONS
CONCERNING THIS ORDER SHOULD BE
DIRECTED TO THE DEPARTMENT
CONTACT.

Order Number:	CMA 0947 0947 ERP2400000001 2	Procurement Folder:	1430380
Document Name:	Maintenance, Support, and Services for the wvOASIS platform	Reason for Modification:	Change Order No. 1 - Administrative change to make changes to commodity lines for payment and delivery order purposes.
Document Description:	Maintenance, Support, and Services for the wvOASIS platform		
Procurement Type:	Central Sole Source		
Buyer Name:			
Telephone:			
Email:			
Shipping Method:	Best Way	Effective Start Date:	2024-07-01
Free on Board:	FOB Dest, Freight Prepaid	Effective End Date:	2034-12-31

VENDOR	DEPARTMENT CONTACT																				
Vendor Customer Code: 000000197636 CGI TECHNOLOGIES & SOLUTIONS INC 12907 COLLECTIONS CTR DR CHICAGO IL 60693 US Vendor Contact Phone: 561-779-9686 Extension: Discount Details: <table><thead><tr><th></th><th>Discount Allowed</th><th>Discount Percentage</th><th>Discount Days</th></tr></thead><tbody><tr><td>#1</td><td>No</td><td>0.0000</td><td>0</td></tr><tr><td>#2</td><td>No</td><td></td><td></td></tr><tr><td>#3</td><td>No</td><td></td><td></td></tr><tr><td>#4</td><td>No</td><td></td><td></td></tr></tbody></table>		Discount Allowed	Discount Percentage	Discount Days	#1	No	0.0000	0	#2	No			#3	No			#4	No			Requestor Name: Matthew H Ellison Requestor Phone: (304) 741-8565 Requestor Email: matt.ellison@wvoasis.gov 2025 FILE LOCATION _____
	Discount Allowed	Discount Percentage	Discount Days																		
#1	No	0.0000	0																		
#2	No																				
#3	No																				
#4	No																				

INVOICE TO	SHIP TO
CONTROLLER ENTERPRISE RESOURCE PLANNING BOARD 1007 BULLITT STREET SUITE 400 CHARLESTON WV 25301 US	CONTROLLER ENTERPRISE RESOURCE PLANNING BOARD 1007 BULLITT STREET SUITE 400 CHARLESTON WV 25301 US

CR 1-13-25

Purchasing Division's File Copy

Total Order Amount:

Open End

PURCHASING DIVISION AUTHORIZATION

DATE: *1/13/25*
ELECTRONIC SIGNATURE ON FILE

ATTORNEY GENERAL APPROVAL AS TO FORM

DATE: *1/17/2025*
ELECTRONIC SIGNATURE ON FILE

ENCUMBRANCE CERTIFICATION

DATE: *1-27-25*
ELECTRONIC SIGNATURE ON FILE

Extended Description:

Change Order

Change Order No. 1 - Administrative change order to discontinue commodity lines 15 and 16 in order to correct the line type from "SERVICE" to "ITEM" and add Commodity Lines 31 and 32 to replace the discontinued commodity lines.

No other changes.

Line	Commodity Code	Manufacturer	Model No	Unit	Unit Price
1	81112200			EA	1914856.000000
Service From		Service To		Service Contract Amount	
				0.00	

Commodity Line Description: Advantage Annual Maintenance Fees - 1/1/25 - 12/31/25**Extended Description:**

Line	Commodity Code	Manufacturer	Model No	Unit	Unit Price
2	81112200			EA	2440083.000000
Service From		Service To		Service Contract Amount	
				0.00	

Commodity Line Description: Advantage Annual Maintenance Fees - 1/1/26 - 12/31/26**Extended Description:**

Line	Commodity Code	Manufacturer	Model No	Unit	Unit Price
3	81111507				0.000000
Service From		Service To		Service Contract Amount	
				5000000.00	

Commodity Line Description: Cloud Upgrade Fixed Price Milestones**Extended Description:**

Line	Commodity Code	Manufacturer	Model No	Unit	Unit Price
4	43222636				0.000000
Service From		Service To		Service Contract Amount	
				2750000.00	

Commodity Line Description: Cloud Transition Fees**Extended Description:**

Line	Commodity Code	Manufacturer	Model No	Unit	Unit Price
5	81162000			EA	4750000.000000
Service From		Service To		Service Contract Amount	
				0.00	

Commodity Line Description: Cloud Subscription Fee - 1/1/25 - 12/31/25**Extended Description:**

Line	Commodity Code	Manufacturer	Model No	Unit	Unit Price
6	81162000			EA	4845000.000000
	Service From	Service To		Service Contract Amount	
				0.00	

Commodity Line Description: Cloud Subscription Fee - 1/1/26 - 12/31/26

Extended Description:

Line	Commodity Code	Manufacturer	Model No	Unit	Unit Price
7	81162000			EA	4941900.000000
	Service From	Service To		Service Contract Amount	
				0.00	

Commodity Line Description: Cloud Subscription Fee - 1/1/27 - 12/31/27

Extended Description:

Line	Commodity Code	Manufacturer	Model No	Unit	Unit Price
8	81162000			EA	5040738.000000
	Service From	Service To		Service Contract Amount	
				0.00	

Commodity Line Description: Cloud Subscription Fee - 1/1/28 - 12/31/28

Extended Description:

Line	Commodity Code	Manufacturer	Model No	Unit	Unit Price
9	81162000			EA	5141553.000000
	Service From	Service To		Service Contract Amount	
				0.00	

Commodity Line Description: Cloud Subscription Fee - 1/1/29 - 12/31/29

Extended Description:

Line	Commodity Code	Manufacturer	Model No	Unit	Unit Price
10	81162000			EA	5244384.000000
	Service From	Service To		Service Contract Amount	
				0.00	

Commodity Line Description: Cloud Subscription Fee - 1/1/30 - 12/31/30

Extended Description:

Line	Commodity Code	Manufacturer	Model No	Unit	Unit Price
11	81162000			EA	5349271.000000
	Service From	Service To		Service Contract Amount	
				0.00	

Commodity Line Description: Cloud Subscription Fee - 1/1/31 - 12/31/31

Extended Description:

Line	Commodity Code	Manufacturer	Model No	Unit	Unit Price
12	81162000			EA	5456247.000000
	Service From	Service To		Service Contract Amount	
				0.00	

Commodity Line Description: Cloud Subscription Fee - 1/1/32 - 12/31/32

Extended Description:

Line	Commodity Code	Manufacturer	Model No	Unit	Unit Price
13	81162000			EA	5565382.000000
	Service From	Service To		Service Contract Amount	
				0.00	

Commodity Line Description: Cloud Subscription Fee - 1/1/33 - 12/31/33

Extended Description:

Line	Commodity Code	Manufacturer	Model No	Unit	Unit Price
14	81162000			EA	5676690.000000
	Service From	Service To		Service Contract Amount	
				0.00	

Commodity Line Description: Cloud Subscription Fee - 1/1/34 - 12/31/34

Extended Description:

Line	Commodity Code	Manufacturer	Model No	Unit	Unit Price
15	81111507				0.000000
	Service From	Service To		Service Contract Amount	
			Commodity Ln Discontinued	230.00	

Commodity Line Description: On-Site Hourly Services

Extended Description:

Line discontinued - see Commodity Line 31

Line	Commodity Code	Manufacturer	Model No	Unit	Unit Price
16	81111507				0.000000
	Service From	Service To		Service Contract Amount	
			Commodity Ln Discontinued	180.00	

Commodity Line Description: Off-Site Hourly Services

Extended Description:

Line discontinued - see Commodity Line 32

Line	Commodity Code	Manufacturer	Model No	Unit	Unit Price
17	43230000				0.000000
	Service From	Service To		Service Contract Amount	
				0.00	

Commodity Line Description: OPTIONAL - Punch-Out Catalogs (up to 5 suppliers)

Extended Description:

Line	Commodity Code	Manufacturer	Model No	Unit	Unit Price
18	43230000				0.000000
	Service From	Service To		Service Contract Amount	
				0.00	

Commodity Line Description: OPTIONAL - Punch-Out Catalogs (up to 10 suppliers)

Extended Description:

Line	Commodity Code	Manufacturer	Model No	Unit	Unit Price
19	43230000				0.000000
	Service From	Service To		Service Contract Amount	
				0.00	

Commodity Line Description: OPTIONAL - Punch-Out Catalogs (up to 25 suppliers)

Extended Description:

Line	Commodity Code	Manufacturer	Model No	Unit	Unit Price
20	43222636				0.000000
	Service From	Service To		Service Contract Amount	
				0.00	

Commodity Line Description: OPTIONAL - Additional Non-Production Environment - Small

Extended Description:

Line	Commodity Code	Manufacturer	Model No	Unit	Unit Price
21	43222636				0.000000
	Service From	Service To		Service Contract Amount	
				0.00	

Commodity Line Description: OPTIONAL - Additional Non-Production Environment - Medium

Extended Description:

Line	Commodity Code	Manufacturer	Model No	Unit	Unit Price
22	43222636				0.000000
	Service From	Service To		Service Contract Amount	
				0.00	

Commodity Line Description: OPTIONAL - Additional Non-Production Environment - Large

Extended Description:

Line	Commodity Code	Manufacturer	Model No	Unit	Unit Price
23	81111507				0.000000
	Service From	Service To		Service Contract Amount	
				0.00	

Commodity Line Description: OPTIONAL - Customer Success Manager (0.5 FTE)

Extended Description:

Line	Commodity Code	Manufacturer	Model No	Unit	Unit Price
24	81111507				0.000000
Service From		Service To		Service Contract Amount	
				0.00	

Commodity Line Description: OPTIONAL - Customer Success Manager (1.0 FTE)

Extended Description:

Line	Commodity Code	Manufacturer	Model No	Unit	Unit Price
25	43230000				0.000000
Service From		Service To		Service Contract Amount	
				0.00	

Commodity Line Description: OPTIONAL - Debt Management

Extended Description:

Line	Commodity Code	Manufacturer	Model No	Unit	Unit Price
26	43230000				0.000000
Service From		Service To		Service Contract Amount	
				0.00	

Commodity Line Description: OPTIONAL - Manager Self Service

Extended Description:

Line	Commodity Code	Manufacturer	Model No	Unit	Unit Price
27	43230000				0.000000
Service From		Service To		Service Contract Amount	
				0.00	

Commodity Line Description: OPTIONAL - CGI TestSavvy - Setup and Config

Extended Description:

Line	Commodity Code	Manufacturer	Model No	Unit	Unit Price
28	43230000				0.000000
Service From		Service To		Service Contract Amount	
				0.00	

Commodity Line Description: OPTIONAL - CGI TestSavvy - Annual Hosting

Extended Description:

Line	Commodity Code	Manufacturer	Model No	Unit	Unit Price
29	55101515				0.000000
Service From		Service To		Service Contract Amount	
				0.00	

Commodity Line Description: Annual SOC Report

Extended Description:

Line	Commodity Code	Manufacturer	Model No	Unit	Unit Price
30	43230000				0.000000
Service From		Service To		Service Contract Amount	
				0.00	

Commodity Line Description: OPTIONAL - Advantage Insight

Extended Description:

Line	Commodity Code	Manufacturer	Model No	Unit	Unit Price
31	81162000			EA	230.000000
Service From		Service To		Service Contract Amount	
				0.00	

Commodity Line Description: On-Site Hourly Services

Extended Description:
Created on Change No 1

Line	Commodity Code	Manufacturer	Model No	Unit	Unit Price
32	81162000			EA	180.000000
Service From		Service To		Service Contract Amount	
				0.00	

Commodity Line Description: Off-Site Hourly Services

Extended Description:
Created on Change No 1

	Document Phase	Document Description	Page 8
ERP2400000001	Draft	Maintenance, Support, and Services for the wvOASIS platform	

ADDITIONAL TERMS AND CONDITIONS

See attached document(s) for additional Terms and Conditions



Lyle, Tara L <tara.l.lyle@wv.gov>

Fwd: Review: CO1 - CMA ERP24*01 - Maintenance, Support, and Services for the wvOASIS platform

1 message

McDonnell, Larry D <larry.d.mcdonnell@wv.gov>

Mon, Jan 6, 2025 at 9:39 AM

To: Tara L Lyle <tara.l.lyle@wv.gov>

Tara,

See attached checklist from Evan. This is for the change order for CMA ERP24-01. Just in case you make it back to the office before I do.

If not, I have no problem taking care of it when I get in.

Thanks,

Larry McDonnell

Senior Buyer, Purchasing Division

304-558-2063 • Larry.D.Mcdonnell@wv.gov



----- Forwarded message -----

From: **Evan Pauley** <evan.pauley@wvoasis.gov>

Date: Thu, Jan 2, 2025 at 9:46 AM

Subject: RE: Review: CO1 - CMA ERP24*01 - Maintenance, Support, and Services for the wvOASIS platform

To: McDonnell, Larry D <larry.d.mcdonnell@wv.gov>

Good morning Larry,

This one should be headed back your way shortly. Please find the attached requisition checklist.

Thank you,

Evan Pauley

Controller

WV Enterprise Resource Planning Board

Ph: 304-935-0425



"This E-mail and any of its attachments may contain WV State Auditor's Office proprietary information, which is privileged, confidential, or subject to copyright belonging to the WV State Auditor's Office. This E-mail is intended solely for the use of the individual or entity to which it is addressed. If you are not the intended recipient of this E-mail, you are hereby notified that any dissemination, distribution, copying, or action taken in relation to the contents of and attachments to this E-mail is strictly prohibited and may be unlawful. If you have received this E-mail in error, please notify the sender immediately and permanently delete the original and any copy of or printout of this E-mail."

From: McDonnell, Larry D <larry.d.mcdonnell@wv.gov>

Sent: Thursday, December 26, 2024 4:15 PM

To: Evan Pauley <evan.pauley@wvoasis.gov>

Subject: Review: CO1 - CMA ERP24*01 - Maintenance, Support, and Services for the wvOASIS platform

Good afternoon Evan,

I reviewed change order 1 for CMA ERP24*01 you submitted. I put it back into draft mode and made some revisions to the modification tab and the extended description tab.

This is back in your bucket.

Also, I need the compliance checklist completed and uploaded to the procurement folder and or sent to me via email.

<https://www.state.wv.us/admin/purchase/Documents/RequisitionSubmissionChecklist.pdf>

Thanks,

Larry McDonnell

Senior Buyer, Purchasing Division

304-558-2063 • Larry.D.Mcdonnell@wv.gov



Procurement Excellence Through Collaboration and Service

2019 Washington St. E. • Charleston, WV 25305
(304) 558-2306 • Purchasing.Division@wv.gov

CAUTION: This email originated from outside the organization. Do not click on links or open attachments unless you recognize the sender and know the content is safe.

 **CMA ERP24_01 - RequisitionChecklist - Admin Change Order No. 1.pdf**
230K

You are viewing this page over a secure connection. Click [here](#) for more information.

West Virginia Secretary of State — Online Data Services

Business and Licensing

Online Data Services Help

Business Organization Detail

NOTICE: The West Virginia Secretary of State's Office makes every reasonable effort to ensure the accuracy of information. However, we make no representation or warranty as to the correctness or completeness of the information. If information is missing from this page, it is not in the The West Virginia Secretary of State's database.

CGI TECHNOLOGIES AND SOLUTIONS INC.

Organization Information								
Org Type	Effective Date	Established Date	Filing Date	Charter	Class	Sec Type	Termination Date	Termination Reason
C Corporation	9/18/2000		9/18/2000	Foreign	Profit			

Organization Information			
Business Purpose	5416 - Professional, Scientific and Techincal Servies - Professional, Scientific and Techincal Servies - Management, Scientific and Tech Consulting Services (administrative, general, HR, marketing, process, physical distribution, logistics, environmental)		Capital Stock
Charter County		Control Number	35692
Charter State	DE	Excess Acres	
At Will Term		Member Managed	
At Will Term Years		Par Value	
Authorized Shares	0	Young Entrepreneur	Not Specified

Addresses

Type	Address
Local Office Address	209 WEST WASHINGTON STREET CHARLESTON, WV, 25302
Mailing Address	11325 RANDOM HILLS ROAD FAIRFAX, VA, 22030 USA
Notice of Process Address	CORPORATION SERVICE COMPANY 209 WEST WASHINGTON STREET CHARLESTON, WV, 25302
Principal Office Address	11325 RANDOM HILLS ROAD FAIRFAX, VA, 22030 USA
Type	Address

Officers

Type	Name/Address
Director	TIMOTHY J. HURLEBAUS 11325 RANDOM HILLS ROAD FAIRFAX, VA, 22030
Director	STEVE PERRON + ONE OTHER 1350 RENE-LEVESQUE BLVD. WEST 25TH FLOOR MONTREAL, PQ, H3G 1T4
President	TIMOTHY J. HURLEBAUS 11325 RANDOM HILLS ROAD FAIRFAX, VA, 22030
Secretary	BENOIT DUBE 1350 RENE-LEVESQUE BLVD. WEST 25TH FLOOR MONTREAL, PQ, H3G 1T4
Treasurer	STEVE PERRON 1350 RENE-LEVESQUE BLVD. WEST 25TH FLOOR MONTREAL, PQ, H3G 1T4
Type	Name/Address

Name Changes

Date	Old Name
------	----------

11/30/2006	CGI-AMS INC.
7/31/2006	AMERICAN MANAGEMENT SYSTEMS, INC.
Date	Old Name

Date	Amendment
11/30/2006	NAME CHANGE: FROM CGI-AMS INC.
7/31/2006	NAME CHANGE: FROM AMERICAN MANAGEMENT SYSTEMS, INC.
Date	Amendment

Annual Reports
Filed For
2024
2023
2022
2021
2020
2019
2018
2017x
2017
2016
2015
2014
2013
2012
2011
2010
2009
2008
2006
2005
2004
2003

2002

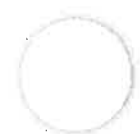
Date filed

[File Your Current Year Annual Report Online Here](#)

For more information, please contact the Secretary of State's Office at 304-558-8000.

Thursday, January 2, 2025 — 4:04 PM

© 2025 State of West Virginia



Keyword Search

For more information on how to use our keyword search, visit our help guide

Simple Search

Search Editor

☐ Any Words 

☐ All Words 

☐ Exact Phrase 

e.g. 123456789, Smith Corp

"cgi technologies & solutions inc" 

Entity 

Location 

Status 

☒ Active

☐ Inactive

Reset 



No matches found

Your search did not return any results for active records.

Would you like to include inactive records in your search results?

Search inactive

Go back

COMPLIANCE VERIFICATION CHECKLIST FOR REQUISITION SUBMISSION

Purchasing Division Use: Buyer: <u>LM ITC</u> Date: <u>1/8/25</u> Solicitation No. <u>Cat#1</u> <u>Correct line item</u> <u>types on CL 15:16</u> <u>added 31:32</u>	Agency: 0947 / WV ERP Board Procurement Officer Submitting Requisition: Evan Pauley Requisition No. CMA ERP2400000001 PF No.: 1430380
---	--

This checklist **MUST** be completed by a state agency's designated procurement officer and submitted with the Purchase Requisition to the Purchasing Division. The purpose of the checklist is to verify that an agency procurement officer has obtained and included required documentation necessary for the Purchasing Division to process the requisition without future processing disruptions. At the agency's preference, the agency **MUST** either submit the checklist by attaching it to the requisition's Header **OR** by placing it in the requisition's Procurement Folder.

FOR ALL SOLICITATION TYPES:

	Compliance Check Type	Required	Provided, if Required	Not Required	Purch. Div. Confirmation
1	Specifications and Pricing Page included	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Use of correct specification template	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Use of correct requisition type [CRQS → CCT or CPO] or [CRQM → CMA]	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Use of most current terms and conditions (www.state.wv.us/admin/purchase/TCP.pdf)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Maximum budgeted amount in wvOASIS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Suggested vendors in wvOASIS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	Capitol Building Commission pre-approval	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	Financing (Governor's Office) pre-approval	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	Fleet Management Division pre-approval	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Compliance Check Type	Required	Provided, if Required	Not Required	Purch. Div. Confirmation
10	Insurance requirements				
	Commercial General Liability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Automobile Liability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Workers' Compensation/Employer's Liability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Cyber Liability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Builder's Risk/Installation Floater	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Professional Liability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Other (specify)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11	Office of Technology CIO pre-approval	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12	Treasurer's Office (banking) pre-approval	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

FOR CHANGE ORDERS/RENEWALS:

1	Two-party agreement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2	Standard change order language	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3	Office of Technology CIO approval	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
4	Justification for price increases/backdating/other	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
5	Bond Rider (Construction)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
6	Secretary of State Verification	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
7	State debarment verification	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8	Federal debarment verification	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

*The items pre-checked are required before a Purchase Requisition may be submitted to the Purchasing Division. Failure to complete and verify this documentation may result in rejection of the requisition back to the agency. It is up to the agency procurement officer to determine if pre-approvals, insurance, or other documentation is needed for the purchase. The referenced information below may be used to make this determination.

For Purchasing Division Use Only:

I have reviewed the requisition identified above and find that it is sufficient to advertise publicly to the vendor community. My review does not preclude the possibility that the vendor community, or some other entity, will identify an area of concern; however, should such issues or concerns arise, they will be reviewed and addressed as may be appropriate.

Signature: _____

Tina Hfe